1   a and b are both prime numbers.

They are each less than 20

Give an example where $a + b$ is odd but **not** prime.

[2 marks]

_____

_____
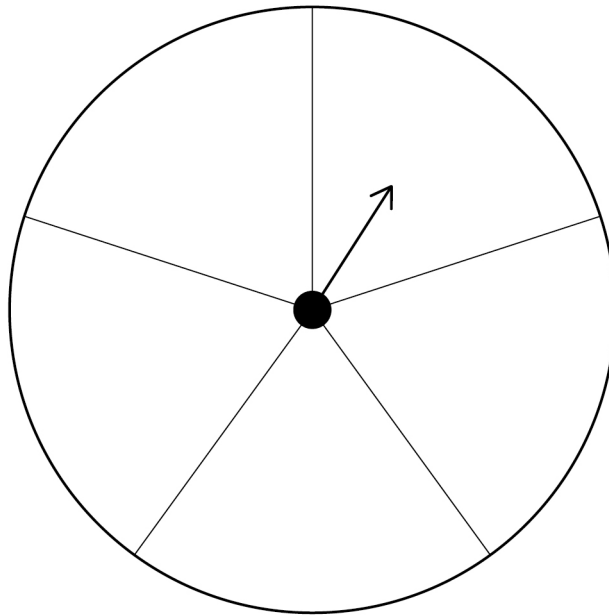
_____

$a = $ _____ $b = $ _____

2   Work out the lowest common multiple (LCM) of 120 and 144

[2 marks]

Answer _____

[2 marks]

3   A spinner has five equal sections.

Write a number in each section so that

the numbers are all different factors of 100

P(single-digit number) $= \dfrac{3}{5}$

P(multiple of 25) $= \dfrac{1}{5}$

[3 marks]

4   Work out

cube root of 512 : reciprocal of 0.4

Give your answer in the form $n : 1$

[3 marks]

Answer _____ : _____

5   Circle the factor of 32

[1 mark]

16   12   3   64

6   Work out two numbers that

are multiples of 9

and

have a difference of 54

[2 marks]

Answer _____ and _____

Erik thinks of a prime number between 20 and 30

His number is x% of 125

Work out **one** possible value of x.

[3 marks]

Answer _____

8   Show that 2125 can be written as

a cube number **multiplied** by a prime number between 10 and 20

[2 marks]

⁹)   Circle the number that is a factor of 10

[1 mark]

                    7   6   5   4

10 (a)   Work out the multiple of 60 that is closest to 400

[2 marks]

Answer _____

10 (b)   Work out the highest common factor (HCF) of 12 and 18

[2 marks]

Answer _____

11   Two prime numbers are multiplied together.

The answer is an **even** number between 50 and 60

Complete the calculation.

[3 marks]

$$\boxed{} \times \boxed{} = \boxed{}$$

12 (a) Complete the boxes using

a factor of 12

and

a factor of 40

[2 marks]

$$\boxed{} \times \boxed{} = 30$$

12 (b) Complete the boxes using

a square number

and

a prime number.

[2 marks]

$$\boxed{} \div \boxed{} = 18$$

13   Circle the number that is a multiple of 25

[1 mark]

55   65   75   85

14 Written as the product of prime factors,

$$12\,600 = 2^3 \times 3^2 \times 5^2 \times 7$$

and

$$14\,112 = 2^5 \times 3^2 \times 7^2$$

Work out the highest common factor (HCF) of $12\,600$ and $14\,112$

Give your answer as an integer.

[2 marks]

Answer _____

15 (a)   Write down the **two** prime numbers between 25 and 35

[2 marks]

Answer _____ and _____